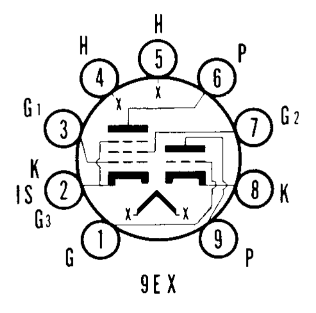


TYPE 50FY8



MECHANICAL DATA

Bulb	T-6½
Base	E9-1, Small Button 9-Pin
Outline	6-4
Basing	9EX
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage	50 Volts
Heater Current	150 Ma
Heater-Cathode Voltage (Design Maximum Values)	
Heater Negative with Respect to Cathode	
Total D C and Peak	200 Volts Max.
Heater Positive with Respect to Cathode	
D C	100 Volts Max.
Total D C and Peak	200 Volts Max.

RATINGS (Design Maximum Values)

	Triode Section	Pentode Section
Plate Voltage	150	150 Volts Max.
Grid No. 2 Voltage		150 Volts Max.
Plate Dissipation	1.0	10 Watts Max.
Grid No. 2 Dissipation		3 Watts Max.
Grid No. 1 Circuit Resistance		
Fixed Bias	1.0	0.5 Megohm Max.
Cathode Bias	3.0	1.0 Megohm Max.

CHARACTERISTICS AND TYPICAL OPERATION

Class A_1 Amplifier	Triode Section	Pentode Section
Plate Voltage	125	125 Volts
Grid No. 2 Voltage	...	125 Volts
Grid No. 1 Voltage	−1.5	... Volts
Cathode Bias Resistor		120 Ohms
Zero Signal Plate Current	2.5	70 Ma
Max. Signal Plate Current		66 Ma
Zero Signal Grid No. 2 Current		10 Ma
Max. Signal Grid No. 2 Current		19 Ma
Transconductance	2700	7500 μmhos
Amplification Factor	46	....
Plate Resistance	17,000	5000 Ohms
Load Resistance		2000 Ohms
Power Output		3 Watts
Total Harmonic Distortion		10 Percent

APPLICATION

Type 50FY8 contains a high mu triode and Beam Power amplifier in a T-6½ envelope. The Beam Pentode is capable of furnishing 3 watts of output at a B+ voltage of 125 volts.